

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 1-36 are pending in this application. Claims 1, 2, 5, and 6 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. patent 5,986,675 to Anderson et al. (herein "Anderson"). Claims 3, 4, and 7-36 were rejected under 35 U.S.C. § 103(a) as unpatentable over Anderson in view of U.S. patent 5,982,909 to Erdem et al. (herein "Erdem").

Addressing the above-noted rejections, those rejections are traversed by the present response.

The claims are amended by the present response to make minor clarifications therein. Specifically, independent Claim 1 now clarifies that the at least one of the object regions that is specified is "in video data of a first frame of the plurality of frames as a reference object region". Independent Claim 1 now also clarifies that the obtained conversion parameter represents conversion from the reference object "into a specified object region in video data of a second frame of the plurality of frames". The other independent claims are similarly amended, and the dependent claims are amended to be consistent with the above-noted amendments to the independent claims as needed, and to make other minor clarifications.

Applicants note that such claim features are believed to be clear from the original specification, see for example Figures 2-4, and specifically step S101 in Figure 2 that shows that an input object region is in "video", and Figures 3 and 4 showing a processing of video data in an object region in each of frames.

The currently claimed features are believed to clearly distinguish over the applied art.

The claims are directed to a method, apparatus, and computer readable recording medium that calculate a conversion parameter representing conversion from a reference object region in a reference frame into a specified object region in another frame, approximate a temporal trajectory of the conversion parameter with a function of time, and

describe the function. Non-limiting examples of such operations are shown in Figures 2-4 in the present specification. Further, depending on a location of the reference frame, a considerable error may be generated. The reference frame is then updated when the error exceeds a threshold value, see specifically step S105 in Figure 2 of the present specification as a non-limiting example.

The currently claimed features are believed to clearly distinguish over Anderson, and further in view of Erdem.

More specifically, Anderson merely teaches that a user can select an actor, the selected actor is placed and oriented in a 3D scene, and the user begins to record a movie and causes the actor to move along a user-defined path anywhere in the scene and performs any of a variety of actions.¹ The outstanding rejection relies on such teachings in Anderson to meet the claim limitations directed to "obtaining a conversion parameter", as the outstanding Office Action notes that in Anderson the conversion parameter is the "changing costumes, walking, or crawling".²

However, applicants respectfully note that in view of the above-noted teachings in Anderson it is clear that Anderson does not calculate a conversion parameter as in the claims and does not describe an object region data using the conversion parameter as in the claims. More specifically, the changing costumes, walking, and crawling noted in Anderson does not result in obtaining a conversion parameter representing conversion from a "reference object region into a specified object region in video data of a second of the plurality of frames", as now required in the independent claims.

The outstanding rejection also recognizes that Anderson does not describe updating a reference frame to minimize the error between an actual object region and a predicted object

¹ Anderson at column 6, lines 9-22.

² Office Action of July 31, 2003, page 2, line 9-10 of prenumbered paragraph 2.

region, as recited in claims 7-10. To address that recognized deficiency in Anderson the outstanding Office Action cites the teachings in Erdem, and particularly the teachings in Erdem directed to describing a sample location 70 giving a lowest prediction error kept as a new location for G, i.e. let $g_{k+1}=x$, as noted in Erdem at column 12, lines 30-40.

However, in response to that basis for the outstanding rejection applicants note that in Erdem the sample location 70 is a location of node G51 and not a reference frame. Thus, the teachings in Erdem do not overcome the recognized deficiencies in Anderson, and thus claims 7-10 even further distinguish over the applied art.

In view of the foregoing comments, applicants respectfully submit that each of the currently pending claims is allowable over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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